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DANIELS, ANTHONY J				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/584,496

Applicant(s)

ELDON ET AL.

Examiner

ANTHONY J. DANIELS

Art Unit

2622

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4-20, 22-28 and 32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-20, 22-28 and 32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☒ Other: WO 03/075475 and Fig. 5

DETAILED ACTION

Response to Amendment

1. The amendment, filed 7/6/2009, has been entered and made of record. Claims 1,4-20,22-28 and 32 are pending in the application.

Response to Arguments

1. Applicant's arguments regarding independent claims 1 and 28 and the Hiroyasu et al. reference have been fully considered but they are not persuasive.

Applicant argues, "...there is no disclosure [in Hiroyasu] of first and second axes being spaced apart and parallel to each other..." The examiner respectfully disagrees and submits that at least Figure 5 can be viewed to show first and second axes spaced apart and parallel to each other. More specifically, while axis "12-1" of Figure 5 is clearly shown, another axis does exist parallel and spaced apart from axis "12-1" located within the hole of an arm of the supporting member "73" such that when display section rotates about those axes simultaneously. Similarly, the examiner disagrees with Applicant's contention that no fourth axis exist being perpendicular to the first and second axes. At least Figure 5, shows an unnumbered axis parallel and spaced apart from axis "11-6" located within the confines of the unnumbered center member of supporting member "74". Lastly, Applicant argues, "...there would be insufficient space for the provision of such a third body rotating around an axis perpendicular to the axis of the basic opening/closing motion of the clam shell device when only a single axis is provided for the basic opening/closing motion as in Hiroyasu." The examiner has delineated how more than one axis exists, so those arguments would be deemed moot. Also, it is noted that Figure 5 shows at least

three members (elements “71”, “28” and “72”) that are all rotatable around the aforementioned multiple axes simultaneously. The examiner would like to elaborate on this point, because the present invention differs from Hiroyasu et al. in that the claimed rotating members do not rotate about their respective axes simultaneously. An amendment clarifying this feature would overcome the Hiroyasu et al. reference. Also, the examiner has attached a marked-up version of Figure 5. Please consult when considering these arguments.

As to Applicant traversal of the Official Notice statement of the previous Office Action, the examiner has cited WIPO Publication WO 03/075475.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1,4-13,15-20,22-28 and 32 rejected under 35 U.S.C. 102(b) as being anticipated by Hiroyasu et al. (US 2003/0210440).

As to claim 1, Hiroyasu et al. teaches a handheld electronic device hinge (Figure 5) for mechanically connecting first and second rotatable body members of a handheld electronic device (Figure 4, display section “11” and body section “13”), said hinge comprising a first bracket and a second bracket (Figure 5, supporting members “73” and “75”), wherein said first bracket comprises: a first connecting member for connecting to the first rotatable body member of the handheld electronic device for rotation around a first axis; and a second connecting

member connected to the second bracket for rotation of said second bracket around a second axis (Figure 4), said first and second axes being parallel to each other (Figure 6 and Figure 8), and wherein said second bracket comprises a third connecting member for connecting to the second rotatable body member (Figure 5, unnumbered protruding members of member "75") of the handheld electronic device for rotation around a third axis (Figure 7), said third axis being perpendicular to said first and second axes (Figures 5 and 7), wherein said first bracket further comprises a fourth connecting member for connecting to a third body member of the handheld electronic device (Figure 5, unnumbered protruding members of member "73"); and wherein the third body member is rotatable and the fourth connecting member is for connecting to the third body member of the handheld electronic device for rotation around a fourth axis, said fourth axis being perpendicular to said first and second axes (Figures 5 and 8).

As to claim 4, Hiroyasu et al. teaches a handheld electronic device hinge according to claim 1, wherein said fourth connecting member is a detachable connecting member for detachably connecting to the third body member of the handheld electronic device (Figure 5).

As to claim 5, Hiroyasu et al. teaches a handheld electronic device hinge according to claim 1, wherein the connecting members comprise at least one boss, the brackets being mounted on the boss (Figure 5, supporting member "74").

As to claim 6, Hiroyasu et al. teaches a handheld electronic device hinge according to claim 1*, wherein the first connecting member comprises two bosses located along the first axis (Figure 5).

As to claim 7, Hiroyasu et al. teaches a handheld electronic device hinge according to claim 5, wherein the second connecting member comprises two bosses located along the second axis (Figure 5, two unnumbered protruding members of element “75”).

As to claim 8, Hiroyasu et al. teaches a handheld electronic device hinge according to any claim 5, wherein the third connecting member comprises a single boss located on the third axis (Figure 5, protruding member of element “74”).

As to claim 9, Hiroyasu et al. teaches a handheld electronic device hinge according to claim 5, wherein the fourth connecting member comprises a single boss located on the fourth rotational axis (Figure 5).

As to claim 10, Hiroyasu et al. teaches a handheld electronic device hinge according to claim 5, wherein the brackets have circular holes through which each boss extends, the circular holes having an inner surface which slidably cooperates with an outer surface of the bosses whereby the brackets are supported on the bosses and are rotatable relative to the bosses (Figure 5, unnumbered circular holes).

As to claim 11, Hiroyasu et al. teaches a handheld electronic device hinge according to claim 5, wherein each boss has a through hole for receiving wiring for electrically connecting the parts of the handheld electronic device (Figure 5, circuit board “77”).

As to claim 12, Hiroyasu et al. teaches a handheld electronic device hinge according to claim 11, wherein said through hole is 4 mm or larger (Figure 5).

As to claim 13, Hiroyasu et al. teaches a handheld electronic device hinge according to claim 5, wherein each boss has an elastic member mounted thereon for providing an urging force

against a side surface of the first or second bracket to securely hold the bracket on the boss (Figure 5, element “74” has some degree of elasticity).

As to claim **15**, Hiroyasu et al. teaches a handheld electronic device hinge according to claim 1, wherein the first bracket is a H-shaped bracket comprising a cross-piece and four lobes, said lobes being perpendicular to said cross-piece, each lobe having a circular hole for mounting the first bracket on an outer surface of a boss, wherein the first bracket connects four bosses together (Figure 5).

As to claim **16**, Hiroyasu et al. teaches a handheld electronic device hinge according to claim 15, wherein the cross-piece of the H-shaped bracket has a circular hole for mounting a boss, said boss comprising the fourth connecting member (Figure 5).

As to claim **17**, Hiroyasu et al. teaches a handheld electronic device hinge according to claim 1, wherein the second bracket is a C-shaped bracket comprising a cross-piece and two lobes (Figure 5, member “75”), said lobes being perpendicular to said cross-piece, each lobe having a circular hole for mounting the second bracket on an outer surface of a boss, and the cross-piece having a circular hole for mounting a boss, whereby the two bosses mounted in the lobes comprise the second connecting member and the boss mounted in the cross-piece comprises the third connecting member (Figure 5).

As to claim **18**, Hiroyasu et al. teaches a handheld electronic device comprising a first rotatable body member, a second rotatable body member, a third rotatable body member and a handheld electronic device hinge according to claim 1, said handheld electronic device hinge connecting said first rotatable body member, said second rotatable body member, and said third rotatable body member (Figures 5-8).

As to claim **19**, Hiroyasu et al. teaches a handheld electronic device according to claim 18, wherein the first rotatable body member comprises a keypad or a view screen (Figure 1, LCD unit “28”).

As to claim **20**, Hiroyasu et al. teaches a handheld electronic device according to claim 18, wherein the second rotatable body member comprises a keypad (Figure 1, keyboard “34”) or a view screen.

As to claim **22**, Hiroyasu et al. teaches a handheld electronic device according to claim 18, wherein said third body member is a camera (Figure 5, camera “22”).

As to claim **23**, Hiroyasu et al. teaches a handheld electronic device according to claim 21, wherein said third body member is detachably connected to said hinge (Figure 5, camera detached from hinge).

As to claim **24**, Hiroyasu et al. teaches a handheld electronic device according to claim 18, wherein said handheld electronic device further comprises a connecting element for connecting to a stand (Figure 1, connector “67”).

As to claim **25**, Hiroyasu et al. teaches a handheld electronic device according to claim 18, wherein said handheld electronic device further comprises a connecting element for connecting to an armband (Figure 1, connector “67”).

As to claim **26**, Hiroyasu et al. teaches a handheld electronic device according claim 18, wherein said handheld electronic device further comprises a connecting element for connecting to a necklace (Figure 1, connector “67”).

As to claim **27**, Hiroyasu et al. teaches a handheld electronic device according to claim 18, wherein the electronic device is at least one of a mobile gaming device, a mobile phone

(Figure 1), a hand-held video recorder, an electronic note pad, an electronic book, a PDA, a calculator, a personal stereo and a dictaphone.

As to claim **28**, Hiroyasu et al. teaches a handheld electronic device (Figure 1) comprising a first rotatable body member (Figure 1, display section "11"), a second rotatable body member (Figure 1, body section "13"), a third rotatable body member (Figure 1, camera "22") and a handheld electronic device hinge (Figure 1, hinge section "12"), said handheld electronic device hinge being disposed between said first, second and third rotatable body members (Figure 5) whereby said first, second and third rotatable body members are rotatable relative to each other (Figures 6-8) and wherein said first rotatable body member comprises a keypad (Figure 1, keyboard "34"), said second rotatable body member comprises a view screen (Figure 1, LCD unit "28") and said third rotatable body member comprises a camera (Figure 1, camera "22") wherein said second rotatable body member is rotatable around two perpendicular axes relative to said first rotatable body member, and wherein said third rotatable body member is rotatable around two perpendicular axes relative to said first rotatable body member (Figures 6-8).

As to claim **32**, Hiroyasu et al. teaches a handheld electronic device according to claim 28, wherein said second rotatable body member is rotatable around two perpendicular axes relative to said third rotatable body member (Figure 6).

Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(c), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hiroyasu et al. (US 20030210440).

As to claim 14, Hiroyasu et al. teaches a handheld electronic device hinge according to claim 13. Although it is not stated explicitly is Hiroyasu et al., the examiner takes **Official Notice** that the concept of utilizing a spring to urge components together in a camera phone is well known and expected in the art. One of ordinary skill in the art would have been motivated to utilize a spring to urge the brackets of Hiroyasu et al. together, because springs allow for increased durability.

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. As to WO 03/075475, Jung teaches a rotary hinge mechanism for a portable phone

wherein a hinge spring is located in the mechanism to urge a rotary hinge part to a fixed hinge part (see Figure 1; p. 8, Line 20 – p. 9, Line 6).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTHONY J. DANIELS whose telephone number is (571)272-7362. The examiner can normally be reached on 8:00 A.M. - 5:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571) 272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AD
11/16/2009

/Sinh Tran/
Supervisory Patent Examiner, Art Unit 2622